Serial No. : 10/762,269

Page No. : 5

REMARKS

This Response is filed with a Request for Continued Examination, in view of the Advisory Action mailed March 30, 2006, which stated that Applicants' amendments filed February 21, 2006 were not entered because they raise new issues that would require further consideration and/or search.

Applicants respectfully request reconsideration of the above-identified patent application. Claims 1 and 3-20 remain in the application. Claims 1, 3, 10 and 11 are amended to more particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 2 is cancelled. Claims 12-20 are allowed. Applicants respectfully traverse the rejections as conceivably applied to the amended claims.

I. Invention Summary

The present invention is directed to a tamping labeler for applying labels to objects. The tamping labeler has a tamping face that includes a plurality of vacuum holes. A plurality of projections project outwardly from the tamping face. The projections are mutually exclusive of the vacuum holes. The projections maintain at least a substantial portion of the label at a stand-off from the tamping face to reduce the surface tension between the label and the tamping face. The reduced surface tension helps to ensure that the surface tension between the tamping face and a label is less than the tack adhesion between the label and the product, so that when a label is tamped against a product, it remains there.

Serial No. : 10/762,269

Page No. : 6

Applicants submit that the preambles of independent claims 1, 10 and 11 are substantive limitations to be considered in evaluating patentability. Specifically, claim 1 is directed to a tamping labeler for use in a labeling apparatus, and claims 10 and 11 are directed to a bellows for use in a labeling apparatus. Applicants rely on the fact that the present invention is a tamping labeler to distinguish the present invention from the cited prior art references discussed below that do not disclose or teach a tamping labeler. As stated in the MPEP 2111.02, this reliance transforms the preamble language into a claim limitation. Applicants therefore submit that the preambles of claims 1, 10 and 11 should be given patentable weight.

II. <u>Section 112 Rejections</u>

As previously presented, claim 8 was rejected under 35 U.S.C. 112, second paragraph. In view of the amendments presented herein, Applicants submit that this rejection is overcome.

III. Art Rejections

A. Section 102 Rejection Based on U.S. Patent 5,291,692 to Takahashi

As previously presented, claims 1-3, 10 and 11 were rejected under 35 U.S.C. 102(b) as being anticipated by Takahashi.

Takahashi discloses an apparatus for polishing a glass lens. The apparatus includes a lens holder that supports the lens to be polished. The surface of the lens holder includes a number of vacuum holes. In one embodiment, the lower surface of the lens holder includes step portions that engage the lens.

Serial No. : 10/762,269

Page No. : 7

With respect to amended independent claims 1, 10 and 11, Takahashi does not disclose 1) a tamping labeler or bellows for use in a labeling apparatus or 2) a plurality of projections projecting outwardly from the tamping face for maintaining at least a substantial portion of a label at a stand off from the tamping face (as recited by claims 1 and 10), or for reducing surface tension between a label held by vacuum to said tamping face and said tamping face when said tamping face is wet (as recited by claim 11). Takahashi is directed to an apparatus for polishing a glass lens, and completely fails to disclose, teach or suggest a labeler apparatus with a plurality of projections for holding a label at a stand off from the tamping face.

Because Takahashi fails to disclose all of the elements of amended independent claims 1, 10 and 11 it is respectfully submitted that the rejection based on Takahashi under Section 102 is unfounded and/or overcome, and therefore should be withdrawn.

B. <u>Section 102 Rejection Based on U.S. Patent 5,423,716 to Strasbaugh</u>

As previously presented, claims 1, 4 and 5 were rejected under 35 U.S.C. 102(b) as being anticipated by Strasbaugh.

Strasbaugh discloses a polisher for a semi-conductor wafer. The polisher includes a vacuum surface with a number of vacuum holes and a number of recesses. A soft resilient membrane is attached over the vacuum surface, forming a flat surface for contacting the wafer. When the vacuum is turned on, the flat resilient membrane is sucked into the recesses, forming a plurality of suction cups for holding the semi-

Serial No. : 10/762,269

Page No. : 8

conductor wafer.

With respect to amended independent claims 1, 10 and 11, Strasbaugh does not disclose 1) a tamping labeler or bellows for use in a labeling apparatus, 2) a tamping face having a plurality of vacuum holes, or 3) a plurality of projections projecting outwardly from the tamping face for maintaining at least a substantial portion of a label at a stand off from the tamping face or reducing surface tension between the label and the tamping face. Like Takahashi, Strasbaugh is directed to a completely different apparatus than the present invention. It completely fails to disclose, teach or suggest a labeler apparatus or holding a label at a stand off from a tamping face. In addition, the tamping face of Strasbaugh is a membrane that does not include vacuum holes. The vacuum holes are located behind the membrane in order to suck the membrane into the recesses and form a plurality of suction cups.

Because Strasbaugh fails to disclose all of the elements of amended independent claim 1, it is respectfully submitted that the rejection based on Strasbaugh under Section 102 is unfounded and/or overcome, and therefore should be withdrawn.

C. Section 102 Rejection Based on U.S. Patent 6,527,323 to Nagai

As previously presented, claims 1, 7 and 9-11 were rejected under 35 U.S.C. 102(b) as being anticipated by Nagai.

Nagai discloses a suction pad for lifting and transporting a workpiece.

The suction pad includes a cup-shaped skirt section with a single vacuum hole in the center. The inner surface of the cup includes a number of protrusions that enable the

Serial No. : 10/762,269

Page No. : 9

vacuum force to flow through the recessed spaces between the protrusions. Nagai states that this arrangement reliably holds a workpiece against falling off the suction pad.

With respect to amended independent claims 1, 10 and 11, Nagai does not disclose 1) a tamping labeler or bellows for use in a labeling apparatus, 2) a tamping face having a plurality of vacuum holes, or 3) a plurality of projections projecting outwardly from the tamping face for maintaining at least a substantial portion of a label at a stand off from the tamping face or reducing surface tension between the label and the tamping face. Nagai completely fails to disclose, teach or suggest a labeler apparatus or a plurality of projections for holding a label at a stand off from the tamping face. In addition, Nagai includes only a single vacuum hole at the center of the suction pad. As a result, Nagai achieves a more secure vacuum force between the suction pad and the workpiece – which is completely contrary to the expressed intention of the present invention of reducing the surface tension between the label and the tamping face.

Because Nagai fails to disclose all of the elements of amended independent claims 1, 10 and 11, it is respectfully submitted that the rejection based on Nagai under Section 102 is unfounded and/or overcome, and therefore should be withdrawn.

D. <u>Section 102 Rejection Based on U.S. Patent 6,257,564 to Avneri</u>

As previously presented, claims 1 and 6 were rejected under 35 U.S.C. 102(b) as being anticipated by Avneri.

Avneri discloses a vacuum surface for holding semi-conductor wafers

Serial No. : 10/762,269

Page No. : 10

during manufacturing. The vacuum surface has a plurality of vacuum nipples extending outwardly from the surface. Each vacuum nipple includes a vacuum hole. Avneri states that the vacuum nipples reduce the contact area between the vacuum surface and the semi-conductor wafer.

With respect to amended independent claims 1, 10 and 11, Avneri does not disclose 1) a tamping labeler or bellows for use in a labeling apparatus, 2) a plurality of projections projecting outwardly from the tamping face that are mutually exclusive of the vacuum holes or 3) maintaining at least a substantial portion of a label at a stand off from the tamping face between the label and the tamping face. Avneri does not disclose, teach or suggest a labeler apparatus or maintaining a label at a stand off from a tamping face. Avneri discloses a completely different apparatus for supporting semi-conductor wafers. The Avneri apparatus places the vacuum holes inside the vacuum nipples – at a standoff from the vacuum surface. In contrast, the amended claims recite a plurality of projections that are mutually exclusive of the vacuum holes. The present invention creates a stand off between a label and the tamping face and vacuum holes, in order to reduce the surface tension between the tamping face and a label.

Because Avneri fails to disclose all of the elements of amended independent claims 1, 10 and 11, it is respectfully submitted that the rejection based on Avneri under Section 102 is unfounded and/or overcome, and therefore should be withdrawn.

Serial No. : 10/762,269

Page No. : 11

E. <u>Section 103 Rejection Based on Strasbaugh in View of U.S. Patent</u>
2,723,775 to von Hofe

As previously presented, claims 2 and 3 were rejected under 35 U.S.C. 103 as being unpatentable over Strasbaugh in view of von Hofe.

Von hofe discloses a label applying mechanism with a surface for supporting and transporting labels. One or more vacuum holes are provided for forming a passageway between a vacuum chamber and the surface. The vacuum force is communicated from the vacuum hole to the surface via a series of concentric channels in the surface. Von Hofe states that "in this manner any shape or size of label having a surface area less than the area of the plate 38 will be successfully and firmly adhered by suction to the surface of the plate." Column 4, lines 48-51.

Applicants submit that von Hofe and Strasbaugh, either alone or in combination, do not disclose, teach or suggest the subject matter of amended independent claim 1, from which claim 3 depends. In particular, neither von Hofe nor Strasbaugh disclose, teach or suggest a tamping face including a plurality of projections extending outwardly from the tamping face for maintaining at least a portion of a label at a stand off from the face or for reducing the surface tension between the tamping face and the label. Strasbaugh discloses a flat tamping face, formed by a flexible membrane. Strasbaugh is directed to securing a semi-conductor wafer to the membrane, and completely fails to suggest the addition of projections projecting outwardly from the surface of the membrane – let alone for holding a label at a stand off from the membrane. Von Hofe

Serial No. : 10/762,269

Page No. : 12

teaches channels extending through the label surface. The channels provide a passageway for the negative air pressure to communicate with the label surface. As a result, a label on the label surface of von Hofe receives an increased amount of vacuum force. In contrast the present invention includes projections that hold the label at a stand off from the tamping face and the vacuum holes to reduce the surface tension between the label and the tamping face.

Applicants further submit that van Hofe cannot be combined with Strasbaugh. First, combining Strasbaugh with van Hofe would destroy the intended function of Strasbaugh, because Strasbaugh places a membrane over a series of channels to form a plurality of suction cups and prevent direct contact between the negative air pressure and a semiconductor wafer. Second, there is no basis in either art for combining van Hofe and Strasbaugh. Strasbaugh teaches securely holding a semiconductor to a surface covered with a membrane. Van Hofe teaches a series of air channels for securely holding a label to a label surface. Nothing in either reference teaches or suggests that the combination of these references would provide a labeler apparatus that reduces the surface tension. Third, the references cannot be combined because they are non-analogous art. No person skilled in the art of labelers would look to the art of semi-conductor wafer handling for a solution, or vice versa.

Because van Hofe and Strasbaugh do not disclose, teach or suggest the present invention, Applicant submits that the rejection of claims 2 and 3 under Section 103 is unfounded and/or overcome, and therefore should be withdrawn.

Serial No. : 10/762,269

Page No. : 13

F. <u>Section 103 Rejection Based on Strasbaugh</u>

As previously presented, claim 8 was rejected under 35 U.S.C. 103 as being unpatentable over Strasbaugh.

The Examiner asserts that one of ordinary skill in the art would recognize that a one-way valve could be used in Strasbaugh to create a vacuum. Applicants submit that this ordinary skill does not resolve the above-noted inadequacies of Strasbaugh with respect to amended independent claim 1, from which claim 8 depends. In particular, Strasbaugh does not disclose, teach or suggest a labeler apparatus or a plurality of projections projecting outwardly from the tamping face for maintaining at least a substantial portion of a label at a stand off from the tamping face or reducing surface tension between the label and the tamping face.

Applicant therefore submits that the rejection of claim 8 under Section 103 is unfounded and/or overcome, and therefore should be withdrawn.

G. <u>Dependent Claims</u>

The dependent claims further define Applicants' invention and are therefore even more clearly allowable than the claims discussed above. Claim 3 recites that the projections are arranged such that each hole is at least partially surrounded by at least one of the projections. Claim 4 recites that at least some of the projections are ridges. Claim 5 recites that at least some of the projections are circular ridges. Claim 6 recites that at least some of said projections are domes. Claim 7 recites flexible accordion sides for allowing the tamping labeler to extend and retract. Claim 8 recites a

Serial No. : 10/762,269

Page No. : 14

one-way valve for blocking the holes when a positive pressure is introduced into the tamping labeler. Claim 9 recites that the tamping face is textured and the projections result from the texture of the tamping face.

IV. Conclusion

In view of the above amendments, and these remarks, Applicants respectfully submit that the present application is in condition for allowance. A notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

AG-TRONIC CONTROL SYSTEMS, INC.

By: Warner Norcross & Judd LLP

/Chad E. Kleinheksel/

Chad E. Kleinheksel Registration No. 53 141 900 Fifth Third Center 111 Lyon Street, NW Grand Rapids, MI 49503-2487 (616) 752-2313

CEK/pas

1222231-2